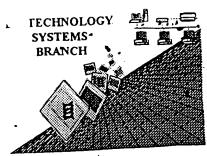# RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: _09/781891_

Source: _OIPE_

Date Processed by STIC: _11/06/01_

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY
FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)
PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER VERSION 3.0 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.
Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

<u>Checker Version 3.0 can be down loaded from the USPTO website at the following address:</u>
http://www.uspto.gov/web/offices/pac/checker

RAW SEQUENCE LISTING   DATE: 11/06/2001
PATENT APPLICATION: US/09/781,891   TIME: 14:35:42

Input Set : **A:\13381.txt**
Output Set: **N:\CRF3\11062001\I781891.raw**

```
 3 <110> APPLICANT: Delaney, William IV
 4         Locarnini, Stephen Alister
 5         Chen, Robert Yung Ming
 6         Bartholomeusz, Angeline
 7         Isom, Harriet
 9 <120> TITLE OF INVENTION: An assay
11 <130> FILE REFERENCE: 2378750/EJH
13 <140> CURRENT APPLICATION NUMBER: 09/781,891
```
C--> **14 <141> CURRENT FILING DATE: 2001-10-15**
```
16 <150> PRIOR APPLICATION NUMBER: 60/179948
17 <151> PRIOR FILING DATE: 2000-02-03
19 <160> NUMBER OF SEQ ID NOS: 22
21 <170> SOFTWARE: PatentIn version 3.0
```

**Does Not Comply
Corrected Diskette Needed**

1. Invalid 213 response see page 4 of 6 A

2. delete EO Sequences Non ASCII text See page 3 of 6

ERRORED SEQUENCES

```
1464 <210> SEQ ID NO: 22
1465 <211> LENGTH: 4496
1466 <212> TYPE: DNA
1467 <213> ORGANISM: HBV 1.5 genome
1469 <400> SEQUENCE: 22
1470 gatatcctgc cttaatgcct ttgtatgcat gtatacaagc taaacaggct ttcactttct   60
1471 cgccaactta caaggccttt ctaagtaaac agtacatgaa cctttacccc gttgctcggc  120
1472 aacggcctgg tctgtgccaa gtgtttgctg acgcaacccc cactggctgg ggcttggcca  180
1473 taggccatca gcgcatgcgt ggaacctttg tggctcctct gccgatccat actgcggaac  240
1474 tcctagccgc ttgtttttgct cgcagccggt ctggagcaaa gctcatcgga actgacaatt  300
1475 ctgtcgtcct ctcgcggaaa tatacatcgt ttccatggct gctaggctgt actgccaact  360
1476 ggatccttcg cgggacgtcc tttgtttacg tcccgtcggc gctgaatccc gcggacgacc  420
1477 cctcgcgggg ccgcttggga ctctctcgtc cccttctccg tctgccgttc cagccgacca  480
1478 cggggcgcac ctctctttac gcggtctccc cgtctgtgcc ttctcatctg ccggtccgtg  540
1479 tgcacttcgc ttcacctctg cacgttgcat ggagaccacc gtgaacgccc atcagatcct  600
1480 gcccaaggtc ttacataaga ggactcttgg actcccagca atgtcaacga ccgaccttga  660
1481 ggcctacttc aaagactgtg tgtttaagga ctgggaggag ctgggggagg agattaggtt  720
1482 aaaggtcttt gtattaggag gctgtaggca taaattggtc tgcgcaccag caccatgcaa  780
1483 cttttttcacc tctgcctaat catctcttgt acatgtccca ctgttcaagc ctccaagctg  840
1484 tgccttgggt ggctttgggg catggacatt gacccttata aagaatttgg agctactgtg  900
1485 gagttactct cgttttttgcc ttctgacttc tttccttccg tcagagatct cctagacacc  960
1486 gcctcagctc tgtatcgaga agccttagag tctcctgagc attgctcacc tcaccatact 1020
1487 gcactcaggc aagccattct ctgctggggg gaattgatga ctctagctac ctgggtgggt 1080
1488 aataatttgg aagatccagc atccagggat ctagtagtca attatgttaa tactaacatg 1140
1489 ggtttaaaga tcaggcaact attgtggttt catatatctt gccttacttt tggaagagag 1200
1490 actgtacttg aatatttggt ctctttcgga gtgtggattc gcactcctcc agcctataga 1260
1491 ccaccaaatg cccctatctt atcaacactt ccggaaacta ctgttgttag acgacgggac 1320
1492 cgaggcaggt cccctagaag aagaactccc tcgcctcgca gacgcagatc tcaatcgccg 1380
1493 cgtcgcagaa gatctcaatc tcgggaatct caatgttagt attccttgga ctcataaggt 1440
1494 gggaaacttt acggggcttt attcctctac agtacctatc tttaatcctg aatggcaaac 1500
```

3. See page 4 of 6 B 220 and Field 223 errors

RAW SEQUENCE LISTING   DATE: 11/06/2001
PATENT APPLICATION: US/09/781,891   TIME: 14:35:42

Input Set : A:\13381.txt
Output Set: N:\CRF3\11062001\I781891.raw

```
1495 tccttccttt cctaagattc atttacaaga ggacattatt aataggtgtc aacaatttgt 1560
1496 gggccctctc actgtaaatg aaaagagaag attgaaatta attatgcctg ctagattcta 1620
1497 tcctacccac actaaatatt tgcccttaga caaaggaatt aaaccttatt atccagatca 1680
1498 ggtagttaat cattacttcc aaaccagaca ttatttacat actctttgga aggctggtat 1740
1499 tctatataag agggaaacca cacgtagcgc atcattttgc gggtcaccat attcttggga 1800
1500 acaagagcta cagcatggga ggttggtcat caaaacctcg caaaggcatg gggacgaatc 1860
1501 tttctgttcc caaccctctg ggattctttc ccgatcatca gttggaccct gcattcggag 1920
1502 ccaactcaaa caatccagat tgggacttca accccatcaa ggaccactgg ccagcagcca 1980
1503 accaggtagg agtgggagca ttcgggccag ggctcacccc tccacacggc ggtattttgg 2040
1504 ggtggagccc tcaggctcag ggcatattga ccacagtgtc aacaattcct cctcctgcct 2100
1505 ccaccaatcg gcagtcagga aggcagccta ctcccatctc tccacctcta agagacagtc 2160
1506 atcctcaggc catgcagtgg aattccactg ccttccacca agctctgcag gatcccagag 2220
1507 tcaggggtct gtatcttcct gctggtggct ccagttcagg aacagtaaac cctgctccga 2280
1508 atattgcctc tcacatctcg tcaatctccg cgaggactgg ggaccctgtg acgaacatgg 2340
1509 agaacatcac atcaggattc ctaggacccc tgctcgtgtt acaggcgggg tttttcttgt 2400
1510 tgacaagaat cctcacaata ccgcagagtc tagactcgtg gtggacttct ctcaattttc 2460
1511 tagggggatc tcccgtgtgt cttggccaaa attcgcagtc cccaacctcc aatcactcac 2520
1512 caacctcctg tcctccaatt tgtcctggtt atcgctggat gtgtctgcgg cgttttatca 2580
1513 tattcctctt catcctgctg ctatgcctca tcttcttatt ggttcttctg gattatcaag 2640
1514 gtatgttgcc cgtttgtcct ctaattccag gatcaacaac aaccagtacg ggaccatgca 2700
1515 aaacctgcac gactcctgct caaggcaact ctatgtttcc ctcatgttgc tgtacaaaac 2760
1516 ctacggatgg aaattgcacc tgtattccca tcccatcgtc ctgggctttc gcaaaatacc 2820
1517 tatgggagtg ggcctcagtc cgtttctctt ggctcagttt actagtgcca tttgttcagt 2880
1518 ggttcgtagg gctttccccc actgtttggc tttcagctat atggatgatg tggtattggg 2940
1519 ggccaagtct gtacagcatc gtgagtccct ttataccgct gttaccaatt ttcttttgtc 3000
1520 tctgggtata catttaaacc ctaacaaaac aaaaagatgg ggttattccc taaacttcat 3060
1521 gggctacata attggaagtt ggggaacttt gccacaggat catattgtac aaaagatcaa 3120
1522 acactgtttt agaaaacttc ctgttaacag gcctattgat tggaaagtat gtcaaagaat 3180
1523 tgtgggtctt ttgggctttg ctgctccatt tacacaatgt ggatatcctg ccttaatgcc 3240
1524 tttgtatgca tgtatacaag ctaaacaggc tttcactttc tcgccaactt acaaggcctt 3300
1525 tctaagtaaa cagtacatga acctttaccc cgttgctcgg caacggcctg gtctgtgcca 3360
1526 agtgtttgct gacgcaaccc ccactggctg gggcttggcc ataggccatc agcgcatgcg 3420
1527 tggaaccttt gtggctcctc tgccgatcca tactgcggaa ctcctagccg cttgttttgc 3480
1528 tcgcagccgg tctggagcaa agctcatcgg aactgacaat tctgtcgtcc tctcgcggaa 3540
1529 atatacatcg tttccatggc tgctaggctg tactgccaac tggatccttc gcgggacgtc 3600
1530 ctttgtttac gtcccgtcgg cgctgaatcc cgcggacgac ccctcgcggg ccgcttggg 3660
1531 actctctcgt cccttctcc gtctgccgtt ccagccgacc acgggcgca cctctcttta 3720
1532 cgcggtctcc ccgtctgtgc cttctcatct gccggtccgt gtgcacttcg cttcacctct 3780
1533 gcacgttgca tggagaccac cgtgaacgcc catcagatcc tgcccaaggt cttacataag 3840
1534 aggactcttg gactcccagc aatgtcaacg accgaccttg aggcctactt caaagactgt 3900
1535 gtgtttaagg actgggagga gctgggggag gagattaggt taaaggtctt tgtattagga 3960
1536 ggctgtaggc ataaattggt ctgcgcacca gcaccatgca acttttcac ctctgcctaa 4020
1537 tcatctcttg tacatgtccc actgttcaag cctccaagct gtgccttggg tggctttggg 4080
1538 gcatggacat tgacccttat aaagaatttg gagctactgt ggagttactc tcgttttgc 4140
1539 cttctgactt ctttccttcc gtcagagatc tcctagacac cgcctcagct ctgtatcgag 4200
1540 aagccttaga gtctcctgag cattgctcac ctcaccatac tgcactcagg caagccattc 4260
1541 tctgctgggg ggaattgatg actctagcta cctgggtggg taataatttg gaagatccag 4320
1542 catccaggga tctagtagtc aattatgtta atactaacat gggtttaaag atcaggcaac 4380
1543 tattgtggtt tcatatatct tgccttactt ttggaagaga gactgtactt gaatatttgg 4440
```

RAW SEQUENCE LISTING   DATE: 11/06/2001
PATENT APPLICATION: US/09/781,891   TIME: 14:35:42

Input Set : A:\13381.txt
Output Set: N:\CRF3\11062001\I781891.raw

    1544 tctctttcgg agtgtggatt cgcactcctc cagcctatag accaccaaat gcccct   4496

E==> 1547 1
E--> 1550 38

Delete End of Sequence Non ASCII text

09/781 821

```
<210> 5
<211> 181
<212> PRT
<213> synthetic
```
Invalid 213 response

```
<220>
<221> variant
<222> (2)..(2)
<223> X = N or D
```

Does Not Comply
Corrected Diskette Needed

Sequence ID #5 11/13/01

1. Field 213 response must be "Artificial Sequence", "Unknown" or the name of some species.

2. A 213 response of "Artificial Sequence" requires an explanation for example "synthetic" on field 223

The type of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

```
<210> 1
<211> 23
<212> DNA
<213> artificial sequence

<400> 1
gcctcatttt gtgggtcacc ata                    23
```

Field 223 is mandatory

```
<210> 2
<211> 20
<212> DNA
<213> artificial sequence

<400> 2
tctctgacat actttccaat
```

Field 223 is mandatory

A 213 field response of "artificial sequence" requires an explanation in field 223.   MB

VERIFICATION SUMMARY   DATE: 11/06/2001
PATENT APPLICATION: US/09/781,891   TIME: 14:35:43

Input Set : A:\13381.txt
Output Set: N:\CRF3\11062001\I781891.raw

```
L:14   M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:28   M:258 W: Mandatory Feature missing, <220> FEATURE:
L:28   M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:36   M:258 W: Mandatory Feature missing, <220> FEATURE:
L:36   M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:341  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:344  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:347  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:350  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:353  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:356  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:359  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:362  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:365  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:368  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:371  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:374  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:853  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:856  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:859  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:862  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:865  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:868  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:871  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:874  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:877  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:880  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:883  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:886  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:889  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:892  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:895  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:1039 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:1042 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:1045 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:1048 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:1051 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:1054 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:1063 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:1067 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:1070 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:1073 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:1076 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:1079 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:1082 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:1085 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:1162 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:1171 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
```

VERIFICATION SUMMARY   DATE: 11/06/2001
PATENT APPLICATION: US/09/781,891   TIME: 14:35:43

Input Set : A:\13381.txt
Output Set: N:\CRF3\11062001\I781891.raw

```
L:1174 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:1199 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:1202 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:1547 M:254 E: No. of Bases conflict, LENGTH:Input:1 Counted:4496 SEQ:22
M:254 Repeated in SeqNo=22
```